

XLI.—On the Longicorn Coleoptera of Japan.

By H. W. BATES, F.L.S.

[Continued from p. 201.]

Family Lamiidæ.

Echthistatus gibber, n. sp.

E. spinoso, Pascoe (Journ. Ent. pl. 17. f. 8), forma similis. Brevis, fuscus, tomento vel squamis fulvo-terreis dense vestitus; capite grosse, sparsim punctato; thorace subquadrato, medio paulo dilatato ibique utrinque spina elongata valida armato, supra multotuberoso; elytris ad trientem apicalem utrinque fortiter gibbosis, inter gibber et humerum flexuoso-carinatis, apice utrinque productis, mucronatis, supra passim inæqualiter granulatis; antennis ♂ corpore plusquam duplo longioribus, scapo scabroso, articulo secundo apice incrassato. Long. 6–8 lin. ♂ ♀.

Maiyasan and Kawatchi, in September.

I place this extraordinary Longicorn, without hesitation, in the genus *Echthistatus*, although it differs in armature from the type species (*E. spinosus*), and inhabits a far distant country, if the locality "Mexico" for *E. spinosus* be a correct one. In the form of the head (broad front, distant antennæ, and concave vertex), antennæ, legs, and general figure of the body, there is great similarity between the present insect and Pascoe's figure. The elytra, however, are very differently tuberculated; on the disk of each, at rather more than two-thirds the length, is a transverse, slightly elevated ridge, between which and the apex is a straight declivity; from the outer end of the ridge runs an obtuse carina, dipping greatly before it reaches the shoulder; and the sides of the elytra from the carina are vertical. The whole surface of the elytra is studded with granulations, larger and smaller. The species varies greatly in many points, especially in the size and number of the granulations and the length of the apical fork-like mucrones.

The species belongs in all its characters to Lacordaire's Groupe *Dorcadides*, and is closely allied to *Dorcadida*.

Monohammus subfasciatus, n. sp.

M. oblongo-subeylindricus, fuscus, fulvo maculatim tomentosus; elytris medio fascia indefinita, abbreviata, cinerea; scutello fulvotomentoso. Long. 6–8½ lin. ♂ ♀.

Nagasaki; many examples.

A typical *Monohammus*, closely allied to *M. Heinrothii*, Cederj., &c. Smaller, and elytra much less elongated than in *M. sartor*; head and thorax relatively narrower; antenniferous tubercles obtuse; thoracic spine very small. The thorax is

cylindrical, and appears more elongated than in *M. sartor*; the punctuation is much finer and shallower. The elytra are singly rounded at the tip, subconfluent-punctured throughout, and thickly sprinkled with spots of tawny pubescence; in all examples there is a transverse spot a little behind the middle, not reaching the suture or side, of grey pubescence or tomentum; it is ill defined on its edges, and is spotted with darker colour. The antennæ in the male are three times the length of the body; robust towards the base, slender towards the tip, and wholly pitchy black; scape densely and finely rugulose-punctate.

Monohammus tesserula, White.

Monohammus tesserula, White, Proc. Zool. Soc. 1858, p. 408.

Hiogo; many examples. Also Hong-Kong, Amoy, and Northern China.

A true *Monohammus*, allied to the North-American *M. titillator*, F.

Monohammus luxuriosus, n. sp.

M. robustus, modice convexus, postice (♂) angustatus, æneo-fuscus, tomento subtili ochraceo-fusco plagiatis vestitus; elytris fasciis duabus, rectis, vagis, obscurioribus. Long. 13-16 lin.

Several examples. Found also in Northern China.

Differs in many points from the typical *Monohammus*, with which it agrees in the moderately narrow, simple mesosternal process, rounded apex of elytra, &c. The antennal scape varies in form in different individuals—in one male before me being clavate, almost pyriform, and in others elongate obconical, as usual in this group; the cicatrice also is "open" in the clavate form, but "closed" and semicircular in other specimens; the joints 3-10 are a little produced and acute at their inner apical angles. The head and thorax above are rather thickly studded with deep punctures, without trace of the rugæ of the typical species. The elytra are finely granulate, punctate towards the base, and very finely punctulate towards the apex, with traces of two raised lines, limited by a row of punctures, on each. The antennæ are scarcely twice the length of the body in the male, and not much abbreviated in the female; they are clothed generally with very fine grey pubescence, the tips of the joints darker. The anterior legs are very moderately elongated in the male.

Mr. Lewis found the species in Mr. Pascoe's collection standing under the name which I have adopted.

Monohammus fraudator, n. sp.

M. fistulatori similis, at subtilius punctatus, etc. Fuscus, tomento subsericeo subtili ochreo-fulvo dense vestitus; capitis vertice im-

punctato; thorace disco pauciter punctulato; elytris apice singulatim rotundatis, supra subtiliter subseriatim punctulatis; antennis plus minusve rufescentibus, articulis a tertio apice obscurioribus, scapo obconico, cicatrice incompleta. Long. 7-11 lin. ♂ ♀.

♂. Antennis articulis 3^a-5^{um} paulo incrassatis.

Nagasaki and Hiogo, common.

Very similar to *M. fistulator* (Germar); rather less robust, more smoothly clothed with fine tawny-ochreous, rather silky, tomentum, and the punctuation scarcely visible to the naked eye. The male, as in *M. fistulator*, *M. argentatus*, and other allied species, has the 3rd to 5th antennal joints distinctly thickened. As the rim which limits the cicatrice of the scape is much abbreviated, the species would, according to Lacordaire's system, belong to a different subfamily from *Monohammus*; and, in fact, I should consider it to be the *Orsidis sobrius* of Pascoe, if that author had mentioned the thickening of the 3rd to 5th antennal joints in the male. It would violate natural affinities too much, however, to separate it from *M. fistulator* and allies.

Monohammus sejunctus, n. sp.

M. fraudatori quam maxime affinis; differt antennarum scapo tumido, clavato, articulis 3^a-5^{um} (♂) linearibus haud incrassatis; tibiis anticis flexuosis, intermediis tuberculo magis acuto. Long. 6-10 lin. ♂ ♀.

Nagasaki and Hiogo, common.

Very similar in form and clothing to *M. fraudator*; the sculpture is also similar, except that in the female the disk of the thorax is more strongly punctured, and the vertex also marked with similar punctures. In the male the punctuation varies, being sometimes similar to that of the female, and at other times like that of *M. fraudator*. Notwithstanding the many points of structural difference (the simple 3rd to 5th antennal joints, more clavate scape, flexuous anterior tibiae, &c.), I strongly suspect it to be only a variety of *M. fraudator*. The tomentum is more silky, especially on the elytra, where it varies by lighter and darker shades.

This species may possibly be the *Orsidis sobrius* (Pascoe).

Monohammus degener, n. sp.

M. parvus; *M. fistulatori* forma similis, rufo-fuscus, tomento griseo et rufo-fusco variegatus; thorace crebre punctato, fulvo-pubescente, spina laterali brevi, sulco transversali basali unico; scutello fulvo-pubescente; elytris passim punctulatis, apice singulatim subacuminatis; antennis rufo-fuscis, articulis basi pallidis; scapi cicatrice fere obsoleta. Long. 4½-5 lin.

Nagasaki; three examples.

The cicatrice of the scape in this small species is scarcely visible; it is present, however, and is limited by a curved rim which is a little less closed than in *M. fraudator*. In habit it resembles very much a dwarfed specimen of that species; but there is a well-marked difference in the punctuation of the thorax, which is rather close and uniform; the pubescence, too, is rather coarser; the lateral spines are very short. The elytra are rather produced and sharp at the sutural apex; and the pubescence is variegated, the ground-colour being reddish tawny and the very irregular patches dull greyish. The 3rd to 5th antennal joints are simple; the basal halves of all joints from the third are grey.

The base of the thorax has two transverse grooves, neither of them very well marked.

Monohammus (Psacotha) hilaris, Pascoe.

Monohammus (Psacotha) hilaris, Pascoe, Tr. Ent. Soc. vol. iv. 2nd ser. p. 103.

Two examples; in a timber-yard, Nagasaki. Also N. China and I. of Formosa.

Melanauster chinensis, Forster.

Melanauster chinensis, Forster, Cent. Ins. p. 39.

L. punctator, Fab. Syst. El.

Var. *macularia*, Thoms. Syst. Céramb. p. 553.

Many examples. On *Eleagnus japonicus*; the larva feeds in the stems.

All the examples belong to what appears to be the var. *macularia*, Thoms., which is rather narrower and less strongly tuberculate at the base of the elytra than the ordinary Chinese form, which is no doubt the true *chinensis*. The var. *macularia* is also abundant in the I. of Formosa.

Melanauster glabripennis, Motschulsky.

Melanauster glabripennis, Motschulsky, Etudes Entom. 1860, p. 19.

Melanauster? ruber, Dalm.

Melanauster? ruber, Dalm., in Schönh. Syn. Ins. iii. App. p. 167.

M. championi, White, Proc. Zool. Soc. 1858, p. 398.

Nagasaki. Common, on firs.

The dense tomentose clothing gives this species a very different facies from the rest of the genus *Melanauster*. The vertex is also narrower, and the antenniferous tubercles more vertical. It has, however, the tuberoso mesosternum and finely granulated eyes of *Melanauster*.

Batocera lineolata, Chevrolat.*Batocera lineolata*, Chevrolat, Rev. et Mag. Zool. 1852, p. 417.*B. chinensis*, Thoms. Arch. Ent. i. p. 170.

Nagasaki; abundant. Found also at Shanghai.

Apriona rugicollis, Chevr.*Apriona rugicollis*, Chevr. Rev. et Mag. Zool. 1852, p. 414.

Many examples. Also at Shanghai, Amoy, and the I. of Formosa.

Uræcha bimaculata, Thoms.*Uræcha bimaculata*, Thoms. Syst. Céramb. p. 84.Common on dead stems of *Cissus*.*Mesosa japonica*, n. sp.

M. myopi proxime affinis, differt colore nigro-fusco, haud griseo, sed tomento fulvo maculatum variegata; elongato-ovata; capite thoraceque confertim granulatis, lineolis fulvis ornatis, thorace lineolis duabus nigris antice et postice ornato, interdum obsoletis; elytris versus basin fortiter granulatis, maculis parvis tenuibus fulvis et nigris conspersis; antennis ♂ apice subhamatis, articulis 3^o-11^{um} basi griseis, scapo grosse scabroso; corpore subtus et pedibus fulvo maculatis. Long. 5½-7 lin. ♂ ♀.

Nagasaki.

Very similar in form to *M. myops*, but decidedly broader or more ovate, and antenniferous tubercles in the male less prominent at the apex. The head and thorax are covered with small, shining, black granulations, and more speckled with bright tawny than in *M. myops*; the four black lineoles much less distinct. The elytra have no trace of the black transverse discoidal spot beyond the middle; they are more densely and largely granulated over their basal half, and are rather evenly sprinkled with wavy specks of bright tawny tomentum, the ground-colour being dark shining brown, with rounded spots of black tomentum.

Mesosa perplexa, Pascoe.*Mesosa perplexa*, Pascoe, Trans. Ent. Soc. ser. 2, vol. iv. p. 243.

Apparently not uncommon. Also N. China and I. of Formosa.

This species differs considerably from the typical *Mesosa*, having a distinct anterior lateral tubercle to the thorax, and forehead very slightly concave between the antenniferous tubercles. The disk of the thorax, however, is not grossly tuberculate, as in *Coptops*; and the eleventh antennal joint in the male is shorter than the tenth, and quite straight.

Mesosa longipennis, n. sp.

M. elongato-oblonga, griseo-olivacea vel griseo-fusca, nigro maculata, maculis in elytris bifasciatim dispositis; thorace breviter cylindrico, supra æquali sparsissime punctato; elytris versus basin sparsim granulato-punctatis; antennis ♂ corpore multo longioribus, articulo undecimo subrecto, fusco-ferrugineis, articulis (præcipue quarto, sexto et octavo) basi griseis. Long. 7-9½ lin. ♂ ♀.

Hiogo; several examples.

A large, elongated species, unlike *Mesosa* in facies, yet closely allied to *M. nebulosa*. The head is concave, in the same degree, between the antennæ and the thorax, free from tubercles; the antennæ also have the eleventh joint nearly straight. The elytra are greatly elongated in comparison with the head and thorax; they are of a light olivaceous-brown colour, varied with greyish wavy marks, speckled throughout with dark brown, and having a number of black marks—viz. one at the base on each side, others at a third the length, arranged as a broken undulated fascia, and others at two thirds the length, also arranged as a much broken fascia, but with a distinct oblong spot on the suture. The thorax is similarly coloured, and shows distinct traces of black lineoles on the anterior and posterior margins. The dark spots are variable, and sometimes obsolete.

Rhodopis Lewisii, n. sp.

R. facie Monohammi, at minor. Elongata, nigro-fusca, pube brevi ochraceo-fusca plagiatis vestita; capite thoraceque (angustis) sparsim fortiter punctatis, hoc vittis tribus angustis ochraceo-fuscis, tuberculo laterali brevi, conico; antennis gracilibus, corpore (♂) triplo, (♀) duplo longioribus, articulis 3^o-11^{um} dimidio basali pallidis; scapo pyriformi, ♂ articulo tertio apice fortiter clavato; tibiis basi rufescentibus. Long. 6-7 lin. ♂ ♀.

Hiogo; many examples.

Differs from the only other described species, *R. pubera*, Thoms. (Sylhet), by the pyriform club of the antennal scape; this joint in *R. pubera*, according to Lacordaire's description, being obconical. The lateral tubercle also seems to be more distinct; it is very short, however, and broadly conical. In all other respects it answers well to the generic characters of *Rhodopis*. The club at the apex of the third antennal joint in the male is very similar in size and shape to the scape; and both are dark brown and glossy. The elytra are somewhat evenly punctured throughout; and the light brown macular, tomentose, pubescence is collected here and there into patches,

which form almost fasciæ a little before and after the middle ; the apex is very briefly and rather obliquely truncated.

Olenecamptus cretaceus, n. sp.

O. magnus, tomento albo-erectaceo incrustatus ; fronte, vitta utrinque laterali, ab oculo usque ad elytrorum apicem, antennis et pedibus fuscis. Long. 11 lin. ♂.

One example.

This fine and distinct species is clothed above and beneath with a white tomentum, so dense and thick that it appears like chalky-white pigment ; a lateral stripe, beginning behind the eye and extending along the upper flank of the thorax and the margin of the elytra, remain naked (or nearly so) and of a fine tawny-brown colour ; on the elytra the vitta emits a short quadrate branch not far from the base, and a second a little beyond the middle ; nearer the apex is a slight projecting angle of the same colour. The forehead is also brown, and coarsely granulate and pubescent. The antennæ are about twice the length of the body, naked, tawny-brown, darker at the base, all the joints (especially towards the base) roughened with sharp tubercles. The legs are tawny brown ; the anterior femora are flexuous, nearly as in the typical species ; the tibiæ are also bent near the end, and serrate interiorly throughout.

Bumetopia oscitans, Pascoe.

Bumetopia oscitans, Pascoe, Trans. Ent. Soc. 2nd ser. vol. iv. p. 252 (1857).

Yochostyla japonica, Thomson, Physis, ii. p. 151 (1868).

Nagasaki ; common in hedges. Also I. of Formosa and Hong-Kong.

The species varies much in size, and also in the relative length and breadth of the thorax ; but Japanese specimens are not specifically distinguishable from Chinese.

Ælara furcata, n. sp.

Æ. postice attenuata, ochraceo-albo tomentosa, thorace lateribus inermi, dorso longitudinaliter rugato, medio carinato ; elytris basi utrinque crista angusta ochraceo penicillata, apice utrinque sinuato-truncatis, angulis externis longe productis, divaricatis. Long. 8-10 lin.

Hiogo, on bamboo fences ; larvæ feed in the interior of the stems. Also I. of Formosa.

Distinguished by the form of its elytra—gradually narrowed and sloping from the basal crests to the apex, with produced divaricate apices. In fresh, unabraded examples the head,

thorax, and sides of the elytra are chalky white, the rest of the elytra being ochreous. The underside and legs are varied with white and ochreous.

Praonetha caudata, n. sp.

P. subcylindrica, robusta; elytris apicem versus fortius angustatis et declivibus, apice ipse utrinque acuminato, ad suturam sinuatim exciso; antennis ♂ corpore triente longioribus, articulis 4^o-11^{um} subæqualibus, filiformibus; corpore supra fortiter punctato: elytris carina centro-basali brevi, alteris duabus discoidalibus post medium elongatis; fuscis, nigro fulvoque conspersis; medio griseis, ante declivitatem posteriorem macula transversa nigra. Long. 6-8 lin. ♂ ♀.

Common everywhere in May.

Belongs to the section with elongate, filiform antennæ—which in the female are equal in length to the body, and in the male a third longer. The antennæ, body, and legs are dark brown; the elytra greyish in the middle, sometimes having a greyish fascia just before the posterior declivity, the fascia bordered behind with black.

Praonetha zonata, n. sp.

P. subcylindrica, robusta; antennis ♂ corpore multo longioribus, ♀ vix brevioribus; nigro-fusca, fulvo paulo variegata; elytris ante declivitatem posteriorem sordide albo fasciatis; crista centro-basali brevi nigro-penicillata, disco bicarinatis, carinis ad fasciæ marginem posticum nigro maculatis; apice intus breviter oblique sinuato-truncatis. Long. $5\frac{1}{2}$ - $6\frac{1}{2}$ lin. ♂ ♀.

Nagasaki; Yokohama.

Closely allied to *Pr. caudata*; but distinguished at once by the apex of the elytra not produced, and the sides near the apex much less gradually narrowed; the dingy or ochreous-white belt just above the posterior declivity is distinct in all examples; but the part of the elytra behind the belt is of a much lighter brown than the basal portion, and is varied with black and grey spots. The thorax is rather closely punctured. The antennæ have filiform, elongated joints, not abruptly shortened after the fourth; they are reddish and variegated, with the tips of the joints darker. The claws, and sometimes the whole claw-joint, are pale rufous.

Praonetha jugosa, n. sp.

P. oblonga, convexa, nigro-fusca; elytris medio canescentibus, utrinque cristis duabus, prima centro-basali, brevi, subconica, altera posteriore elongata, fortiter compressa; declivitate posteriore abrupta utrinque unituberculata, apice oblique truncato; antennis

♂ corpore paulo longioribus, ♀ multo brevioribus, articulis 5^o-11^{um} abbreviatis. Long. $4\frac{1}{2}$ -5 lin. ♂ ♀.

Hiogo, Nagasaki.

Of shorter form than *Pr. caudata*; the posterior discoidal ridge of the elytra very largely developed, long, high, and compressed, the disk between it and the short, almost conical, basal crests appearing concave; this part is clothed with a whitish-ashy pile, the same colour forming a margin to the scutellum and an indistinct patch on the posterior surface of the thorax; the colour of the rest of the body is blackish brown. The sexual difference in the length of the antennæ is well marked—the male having these organs a third longer than the body, with joints 5-11 long, filiform, and subequal; the female having them three fourths the length of the body, and joints 5-11 much shortened. The antenniferous tubercles are unusually elevated in this species, causing the concavity of the vertex to be deeper and more triangular.

Praonetha Bowringii, Pascoe.

Praonetha Bowringii, Pascoe, Trans. Ent. Soc. 3rd ser. vol. iii. p. 170, note.

Many examples. Also Hong-Kong, China.

Praonetha rigida, n. sp.

P. oblonga, atro-fusca, thoracis lineolis prope basin duabus, maculaque utrinque elytrorum versus apicem triangulari, laterali, albo-ochraceis; antennis brevibus, fusco et griseo annulatis; elytris crista centro-basali et carinis duabus posticis (interiore magis elevata), apice brevissime oblique truncatis. Long. $3\frac{1}{4}$ - $4\frac{1}{2}$ lin.

Hiogo, Nagasaki.

Moderately elongated, convex; dark brown, with numerous lighter-brown spots, besides two distinct longitudinal pale lines on the basal part of the disk of the thorax, and an irregular triangular patch of the same colour on each side of the elytra towards the apex. The antennæ are much shorter than the body in the two examples before me (female?), with joints 5-11 forming only one half of the total length. The thorax is very coarsely punctured. The elytra are very convex and laterally compressed (as in all the allied species), abruptly declivous at the apex, with the apex itself briefly and obliquely truncated. The ridges are not very elevated, the basal one moderately elongated, and the posterior one much longer, with an exterior raised line parallel to it; there is also a third, and shorter, raised line, exterior to the second, and a little nearer the apex.

Praonetha angusta, n. sp.

P. elongata, angusta, fusca, nigro, fulvo et griseo indistincte variegata, elytris postice macula sublaterali grisea; antennis filiformibus, ♂ corpore paulo longioribus, articulis 4^o-11^{um} basi testaceis; thorace creberrime punctato; elytris postice gradatim declivibus, apice breviter peroblique truncatis, crista centro-basali subconica, nigro penicillata, carinis posticis obsoletis. Long. 3-3½ lin. ♂ ♀.

Wax-trees, Nagasaki.

By its narrow form this species resembles the *Apomecyninae*, particularly the genus *Ropica*; but the simple middle tibiae show that it belongs to the *Nipponinae*; and the elytral crest, thorax, head, and eyes are those of the genus *Praonetha*. The antennae are elongate; the fourth joint shorter than the third, and the fifth to eleventh gradually and slightly decreasing in length. The head and thorax are short compared with the elongate elytra.

Praonetha leiopodina, n. sp.

Leiopodi nebuloso simillima. Elongato-oblonga, modice convexa, fusca, nigro, fulvo et griseo variegata, elytris pone medium fascia griseo-alba; antennis corporis longitudine, filiformibus, articulis basi griseis; thorace crebre punctulato; elytris modice compressis, postice oblique declivibus, apice brevissime obtuse truncatis, carina centro-basali elevata, arcuata, alteris duabus posticis obtusis, omnino (apice excepto) fortiter punctatis. Long. 3-3¼ lin.

On dead branches of wax-tree. Several examples.

Much resembling in form and colour the common European *Leiopus nebulosus*, but a true *Praonetha* in all its generic and group characters; the head and thorax are rather small compared with the elytra, and the latter are less convex than in typical *Praonethae*; the centro-basal ridge is moderately elevated and regularly arcuated.

Apomecyna neglecta, Pascoe.

Apomecyna neglecta, Pascoe, Trans. Ent. Soc. ser. 3, vol. iii. p. 152.

One example.

Mr. Lewis has compared his specimen with the types of *A. neglecta* in Mr. Pascoe's collection.

Apomecyna naevia, n. sp.

A. linearis, angusta, pallide fusca; elytris guttis cretaceis late con-

spersis, lineatim punctatis, apice singulatim triangulariter productis; thorace crebre punctulato. Long. $3-4\frac{1}{2}$ lin.

Abundant on *Cissus*.

Narrow, linear, light brown, thickly clothed with short, adpressed, yellowish, scale-like hairs, the elytra (very distinctly and evenly lineate-punctate) having a number of small, roundish, isolated, cretaceous spots, about 12 in number, on each; the apex is on each side triangularly produced. The thorax is long and narrow, closely punctured, and having four short whitish streaks—one on each side, one in front, and one behind. The antennæ are pitchy red.

Sybra ordinata, n. sp.

S. angusto-elliptica, elongata, fusca, rufescenti-fusco sublineatim variegata; antennis (♂) corpore triciente longioribus, rufescentibus, scapo brevi ovato-clavato; thorace grosse subsparsum punctato; elytris omnino striato-punctatis, apice oblique truncatis, angulis exterioribus productis. Long. $4\frac{1}{2}$ lin.

Hiogo; on dead *Cissus*-stems.

An elongated species, tapering a little to both extremities; scarcely convex, with elytra declivous from base to apex. The colour is dingy brown, clothed with laid pubescence, varied with tawny reddish, chiefly in indistinct lines down the flat interstices of the well-marked rows of punctures of the elytra. The thorax is nearly cylindrical, the sides being scarcely rounded. The sides of the breast have a few large punctures.

Sybra cribrella, n. sp.

S. elongato-oblonga, convexa; fusca, griseo-ochreo indistincte variegata; capite et thorace elytris multo angustioribus, fortiter punctatis, hoc breviter cylindrico, linea dorsali interrupta lævi; elytris convexis, postice declivibus, apice brevissime oblique truncatis, crebre sublineatim punctatis, interstitiis nonnullis paulo elevatis. Long. $3\frac{1}{2}-4$ lin.

Moon-temple, Kobé.

Approaches *Praonetha* by its rather convex form and comparatively narrow head and thorax. The notch of the middle tibiæ is placed near the end, and distinct, as in *Apomecyna*. The antennæ are of the length of the body, and dull rufescent. There is a slight elevation in the situation of the centro-basal ridges of the elytra. The colour and markings are very obscure and variable; sometimes there is a trace of a lateral cinerous patch on the elytra. The breast beneath is closely and strongly punctured.

[To be continued.]